

IN THE SPECIFICATION

In the specification, please amend the “Related Patent Applications” section of page 1 as follows:

“This patent application is a continuation-in-part of patent application serial no. 09/751,262 filed on December 29, 2000, and issued as patent no. 6,704,301, which is herein incorporated by reference.

In the specification, please amend the second full paragraph of page 7 as follows:

“Although only a limited number of gateways 220 and access nodes 230 are shown in Figure 2, it should be understood by one skilled in the art that an almost unlimited numbers of access nodes 220, at almost unlimited number of hops from the gateways 220 may be implemented, ~~within the scope of this patent~~. For one embodiment, the gateway capacity determines the number of access nodes that may be coupled to the gateway. Thus, for example, if the gateway can handle 10 simultaneous connections to various access nodes, then up to 100 access nodes may be coupled to the gateway. This indicates that no more than 1-in-10 access nodes access the gateway at any one time. This assures that the access nodes never have to wait for the gateway. Depending on the latency that is acceptable, which varies by function (e.g. voice v. data latency), the gateway may support a certain number of access nodes of each function.”

In the specification, please amend the second full paragraph of page 19 as follows:

“The selected availability test paths Ps include the path with the best quality, and other paths within a predetermined amount of quality of the quality of the best path. As described below, the quality can be determined by determining the number of successfully received packet (beacons) versus the number of transmitted packets (beacons). The predetermined amount of quality can be a function of the quality of the best path. A best path can be defined as the path Ps in which no other available path Pj

exists such that $QS(P_i)$ is greater than $QS(P_j)$, where $QS()$ is defined as the quality of the path. As will be described, the quality can be determined by determining a ratio of the number of successfully received packets versus the number of transmitted packets. Mathematically, the selection of paths ~~can~~ be expressed as the paths P_i having short quality figures $QS(P_i)$ that are greater than $QS(P_s) - f(QS(P_s))$ where $f(QS(P_s))$ is a function of the quality of the best path P_s .”

Please amend the abstract of page 31 as follows:

“The invention includes an apparatus and method for determining an optimal route based upon path quality of routes to an access node of a wireless mesh network. The method includes receiving routing packets at the access node through at least one wireless route. Each routing packet ~~including~~ includes route information that identifies the wireless route of the routing packet. A success ratio of a number of successfully received routing packets versus a number of transmitted routing packets is determined over a period of time T_1 , for each wireless route. The wireless route having a greatest success ratio is first selected, as are other wireless routes that have success ratios within a predetermined amount of the greatest success ratio. ~~Of the first selected routes, routing packets are at the access node through the first selected routes. Again, each routing packet including route information that identifies the wireless route of the routing packet. A success long ratio of a number of successfully received routing packets versus a number of transmitted routing packets is determined over a period of time T_2 , wherein T_2 is substantially greater than T_1 , for each first selected route. The wireless route having a greatest success long ratio are second selected, as are other wireless routes that have success long ratios within a second predetermined amount of the greatest success long ratio. The second selected routes having a greatest throughput are third selected. An optimal wireless route based upon the third selected routes is determined.”~~